

STRICOM

# 2002

Annual Report



As all of us know, our train continues moving at 100 miles per hour! Keep in your mind as we work our individual projects, that our "eaches" are part of a greater vision for an interoperable, system of systems approach of our Army Transformation. Providing our soldiers with realistic state-of-the-art simulation systems enables them to perform their missions better and eventually return home from those missions. We should never lose sight of this objective. We provided and continue to provide needed capabilities to our sons and daughters.



### BG STEPHEN M. SEAY

Program Executive Officer

On May 3rd we marked our tenth anniversary as STRICOM and then we took that giant step forward and transitioned to the Program Executive Office (PEO) Simulation, Training and Instrumentation (STRI) on Oct 29th. STRICOM, now PEO STRI is now officially a Program Executive Office under the Assistant Secretary of the Army for Acquisition, Logistics and Technology and the S&T portion remained under AMC and is part of the RDE Command. We will leverage our partnership with the new RDE Command-Orlando. Our collaborative approach to transition innovative technology still seeks to get technology into the hands of the soldiers while it is still state-of-the-art. Keep driving on with your mission to provide the best simulation tools to our soldiers. Kudos to our hardworking team that is making this transition so smooth.

Hooah! \_\_\_\_\_

# Table of Contents

FORWARD	II
10 YEAR MILESTONE	1
CONTRACTS DIR.	2
TOP 10 CONTRACTORS	4
PARTNERING INFO	5
PM ITTS	6
PM TRADE	19
PM WARSIM	41
PM FIELD OPS	44
BOO	54





Ten years ago, the Department of the Army created the Simulation, Training and Instrumentation Command (STRICOM) by combining Project Manager for Training Devices (PM TRADE) - a leader in modeling and simulation, with the Project Manager for Instrumentation, Targets and Threats Simulators (PM ITTS) - whose mission focused on testing, targets, and threat simulators for testing and training. To complete the STRICOM package, the Army established the Project Manager for Combined Arms Tactical Trainers (PM CATT) to manage the first using distributed interactive simulation, and a project office for

## STRICOM *Marks* 10<sup>th</sup> *Year Anniversary*

combined arms assessment to focus on interoperability among a variety of simulation systems. Later, the Project Manager for Warfighting Simulations (PM WARSIM) was established to manage constructive/war game simulation. Since its creation in 1992, STRICOM has become prominent throughout the world as a leader in developing and producing world class simulators, as well as training and testing systems.

STRICOM celebrated this ten year anniversary with an outing at Red Bug Lake Park. A wide array of activities co-ed softball and volleyball, three-on-three basketball, tennis (men's singles, women's singles and doubles), checkers, horseshoes (doubles and singles), a water relay, a water balloon toss, and a dessert contest. It was a great day for those that participated as well as those that cheered them.

# *Contracts Directorate*



### CONTRACT ACTIONS

During 2002 FY, the Contracts Directorate awarded 1,090 contracts, orders, and modifications with a total obligated value of \$669,369,036.

### COMPETITION

Of the 1,090 contract actions awarded in 2002, 996 (91% of total actions) with a total value of \$599,085,782 (90% of obligated dollars) were competitive.

### SMALL BUSINESS PARTICIPATION

Small Businesses received 422 awards (39% of total awards) totaling \$140,358,571 (21% of obligated dollars).

# *Top 10 Contractors*

1. Lockheed Martin Corporation
2. Computer Sciences Corporation
3. Raytheon Company
4. Northrop Grumman Corporation
5. NLX Corporation
6. Science Applications International Corporation
7. Sigcom, Incorporated
8. Tec-Masters, Incorporated
9. Evans & Sutherland Computer Corporation
10. Universal Systems & Technology



# Partnering Program

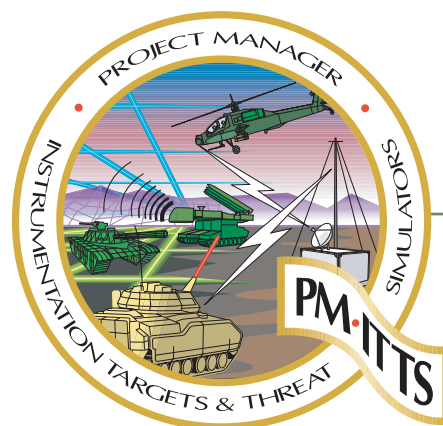
The PEO STRI Partnering program is entering its sixth year of success in bringing together PEO STRI, contractor and end-user employees, soldiers and officers to create an atmosphere of trust and effective program management. Used at any stage of contract performance, the Partnering program has created an atmosphere where there are no "surprises" in partnered contracts.

Through use of the Partnering workshops, follow-on action plans and monthly "accountability" teleconferences with our contractors and end-users, we have added a valuable "tool" to the PEO STRI program management "toolbox."





## *Project Manager* INSTRUMENTATION, TARGETS & THREAT SIMULATORS



## TEST SUPPORT NETWORK (TSN)

During March 2002, the TSN integration team completed 1000 miles of fiber optic cable and associated hardware installation which included splicing and acceptance testing.



WSMR Test Support Network Node - Salinas Peak



WSMR Test Support Network

## RANGE DIGITAL TRANSMISSION SYSTEM (RDTs)

During July 2002, the RDTs integration team completed Windy Hill upgrade on the West Kofa ring. This critical communications node within YPG transports about 50% of all range customer test data and provides a complete automated solution with nearly 100% Quality of Service (QoS).

Elimination of several obsolete micro-wave locations has enabled YPG to reduce annual O&S costs by approximately \$250,000.



### HIGH SPEED MASSIVE MEMORY (HSMM)

The HSMM program provides two levels of data transfer and storage capability for high-speed digital image capture on DoD test ranges

- ♦ High End System capability - Up to 1.0 GB/sec throughput and 10 minutes of storage
- ♦ Entry Level System capability - Up to 60 MB/sec throughput and 30 minutes of storage

PM ITTS and White Sands Missile Range successfully fielded 20 Entry Level Systems to DoD test ranges in June 2002, including Vandenberg AFB, NAWC-WD (China Lake), NAWC-AD (Pax River) and Aberdeen Test Center.

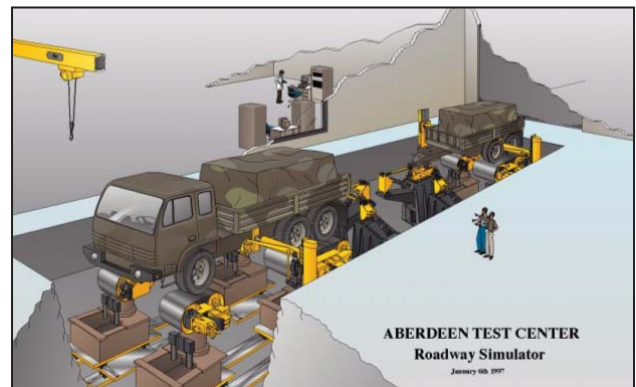


## Program Highlights

### ROADWAY SIMULATOR (RWS)

The RWS provides "vehicle-in-the-loop" simulation to address the performance requirements of advanced-mobility land vehicles, heavy military trucks, and associated payloads

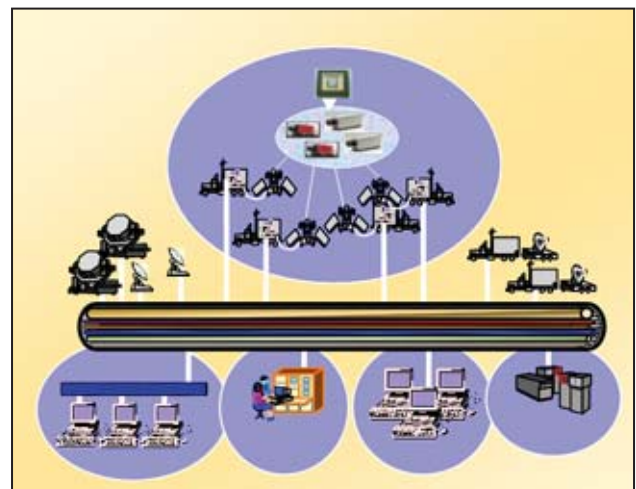
In 2002, the Phase I effort for the RWS facility at Aberdeen Test Center neared completion, which will provide simulated terrain testing of vehicles up to 26,000 lbs.



### DIGITAL VIDEO SYSTEMS DEVELOPMENT (DVSD)

DVSD is a Tri-Service OSD CTEIP-funded project that will fully integrate digital image acquisition, transmission, storage, archival and analysis systems into air, sea and ground based T&E environments.

In March 2002, the DVSD Integrated Development Plan (IDP) was approved by OSD, the first document of its kind to integrate system components/architectures from three different services.



### VERSATILE INFORMATION SYSTEM, INTEGRATED, ON-LINE (VISION)

VISION is a comprehensive, top down redesign of the manner in which information is collected, managed and transformed into knowledge.

VISION supports weapons systems testing by collecting test performance data, catalogs and manages that data in an information data repository. The data repository is a secure web-based system that can be accessed through the Internet to view the information. The information collected is not limited to just the raw data. In many cases the raw data is processed to calculate and verify other data.

In July 2002, the VISION Operational Requirements Document (ORD) was approved by PEO STRI and the Army's Developmental Test Command.

### OBJECTIVE REAL-TIME CASUALTY ASSESSMENT INSTRUMENTATION SYSTEM (ORTCAIS)

ORTCAIS will provide realistic and cost-effective operational "soldier-in-the-loop" real-time casualty/mobility/firepower kill assessment testing of Future Combat Systems and Objective Force digital battlefield initiatives.

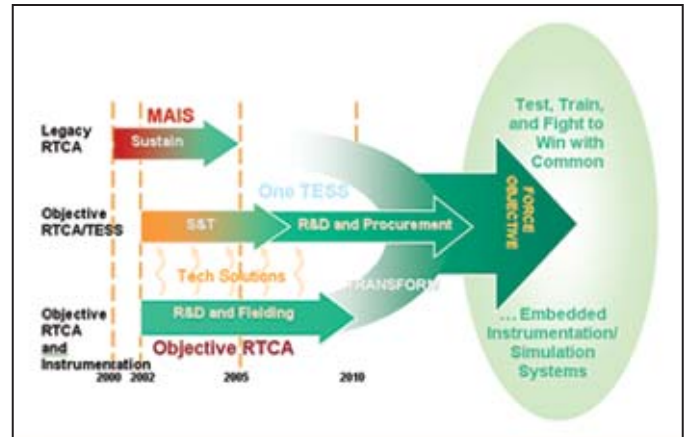
During 4Q FY 2002, MK-19 grenade launchers were delivered by the ORTCAIS program for Interim Armored Vehicle (IAV) testing, and were successfully used in Millennium Challenge 02 & Stryker Comparison Evaluation.



## FOUNDATION INITIATIVES 2010 (FI2010)

The Foundation Initiative 2010 project exists to promote the interoperable use of test and training range systems and is committed to such multi-domain integration.

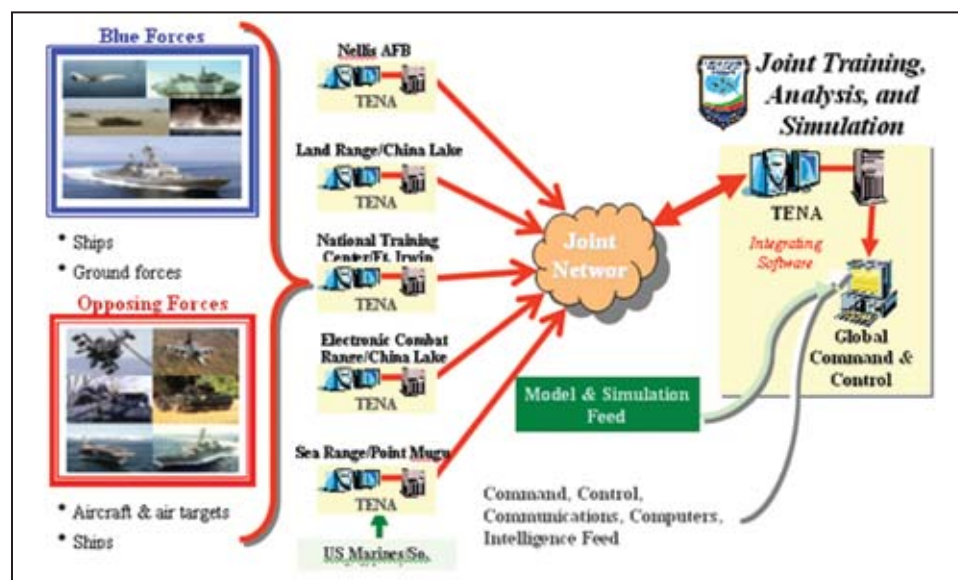
The FI 2010 project's development of the Test and Training Enabling Range Architecture (TENA) is prototyping, developing, and standardizing the software and interfaces needed to achieve a significantly greater level of interoperability and reuse of live and simulated resources throughout the test & training range community.



Supports RTCA Testing of ALL Legacy-to-Objective Combat Systems

From 24 Jul - 15 Aug 2002, FI2010 supported Millennium Challenge 02 (MC02), a Congressionally mandated, Secretary of Defense directed, JFCOM sponsored large-scale, live and simulated Joint Forces field experiment.

## TENA RANGE INTEGRATION IN MILLENNIUM CHALLENGE 2002 (MC02)



### AERIAL TARGET FLIGHT SERVICES (AFTS)

During 2002, 360 missions were conducted under the AFTS program using a variety of subscale, full scale and ballistic missile target systems.

1. Mission support was provided to US Army Air Defense Artillery (ADA) School, tri-service test & evaluation events, and Allied nation test and training missions.

Customers supported included Patriot (PAC-2/PAC-3), Hawk (Japan), Patriot (Japan), Chu-Sam (Japan), AMRAAM (USAF), SM-2/SM-3 (Navy) and ADA Brigade Patriot training (Army).

### RUSSIAN SMERCH MULTIPLE ROCKET LAUNCHER TARGET

During 2002, the TMO received two actual and six surrogate SMERCH multiple rocket launch systems, including spares and field manuals.

SMERCH provided realistic, threat representative targets for user testing by PM's and system developers to optimize system performance.



### LANCE TARGET MISSILE SYSTEM (LTMS)

After completing exhaustive failure testing and correcting deficiencies, the LTMS was released as a fully operational system in April 2002.

During 2002, the LTMS team presented a technical paper on the refurbishment of the LTMS propulsion system at the Joint Army, Navy, USAF, NASA Propulsion Conference.

### MQM-107E STREAKER FIXED-WING TARGET

During 1Q FY 2002, a flight test was conducted on the MQM-107E Streaker fixed-wing target system. The test was highly successful, establishing new altitude and endurance records for the sub-scale target.

The MQM-107E model features an updated control system with programmable digital autopilot, an advanced heading hold feature, and improved aerodynamic control surfaces for better stability.



### AERIAL TARGET CONTROL SYSTEM (ATCS)

During 2002, the ATCS demonstrated successful close-formation flight of three MQM-107 Streaker targets using the TTCSU system.

During this fiscal year, the ATCS also successfully demonstrated an MQM-107 equipped with Common Digital Architecture (CDA) components.

### VIRTUAL TARGETS CENTER

For this fiscal year, the Virtual Targets Center implemented a web-based version of Recognition of Combat Vehicles (ROC-V).

For 2002, the Virtual Targets Center received its first request from an Allied nation (Canada) for access to the Army Model Exchange module, established through PEO STRI to be a Center of Excellence for target models.

### NEXT GENERATION ARMY TARGETRY SYSTEM (NGATS)

The NGATS program commenced in 2002. During this fiscal year, two Industry Day conferences were conducted to solicit responses regarding the NGATS performance specification and Initial Capabilities Document (ICD).



### SA-11 DIGITAL RADAR MODEL

The SA-11 Digital Radar Model (DRM) was established in 2002. The DRM is a real-time, reconfigurable, hi-fidelity, distributed-simulation-capable, and threat faithful representation of a Russian air defense system. The DRM model consists of high fidelity models of both target engagement radars and missile flyout.

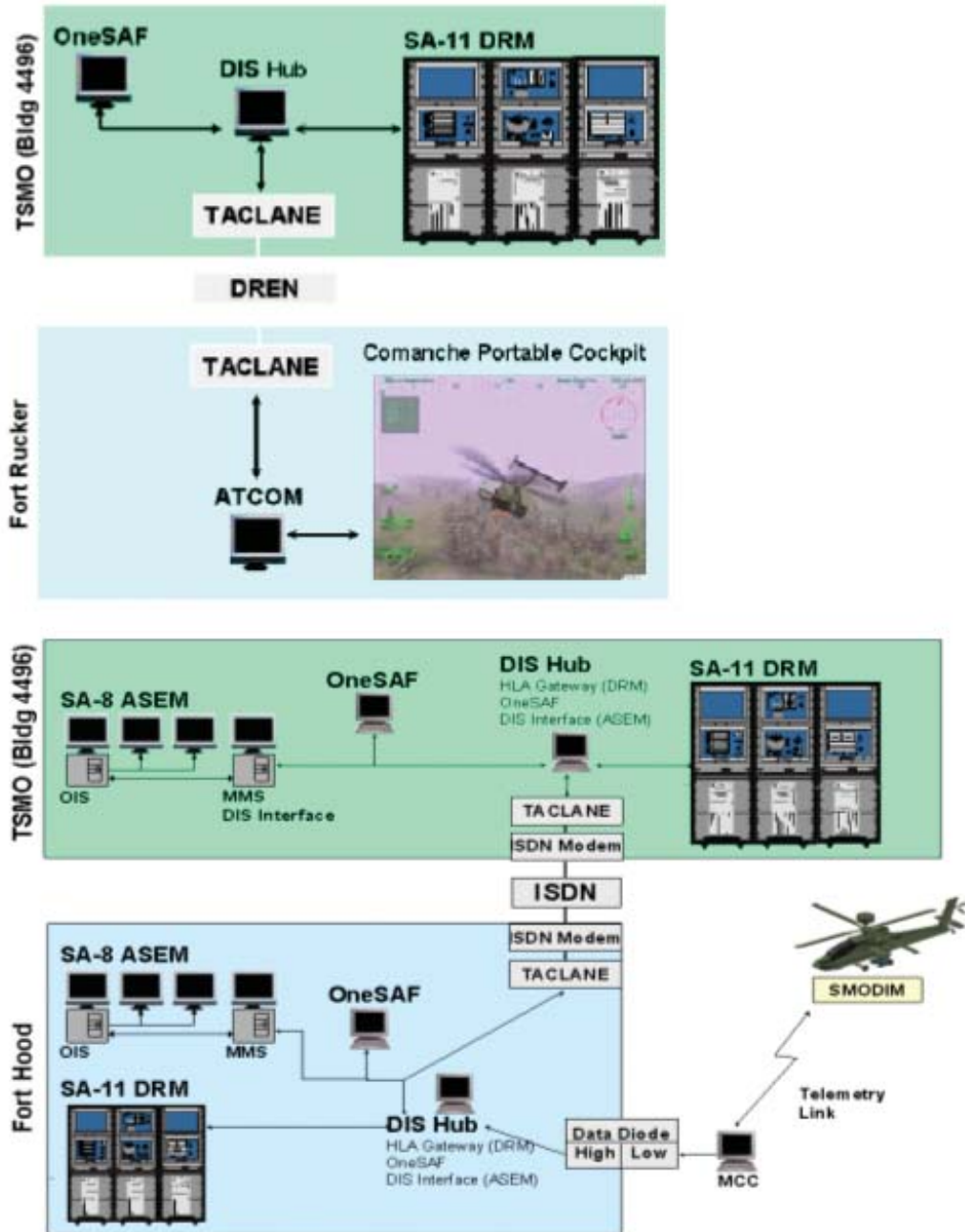
The DRM consists of four main components:

- 1) Radar Environment Simulator
- 2) Receiver Processor Chain
- 3) Missile Model Subsystem
- 4) Operator Interface Subsystem

For 2002, DRM participated in a joint effort proof of concept demonstration of the SA-11 DRM threat model versus an instrumented Apache Longbow and the RAH-66 Comanche CPC and ATCOM simulations.



## THREAT SYSTEMS MANAGEMENT OFFICE (TSMO)

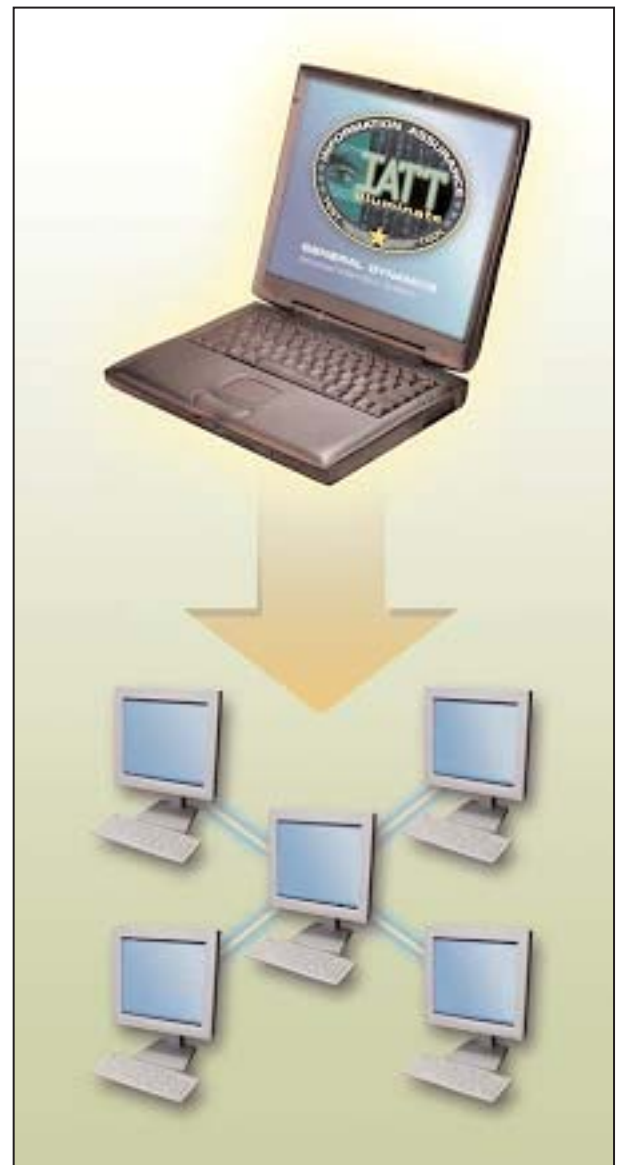


### INFORMATION ASSURANCE TEST TOOL (IATT)

Information Assurance Test Tool (IATT) is an integrated suite of software tools and information assurance threat programs, which launches live interactive and scripted information assurance attacks on targeted computer networks in order to assess their abilities to resist attacks.

IATT was fielded in July 2002. Some characteristics of IATT are as follows:

- ♦ Assortment of threat operations possible: Denial of Service, System Infiltration, Data Exploitation, Network Information Gathering, and Passive Operations
- ♦ Stealthy and non-stealthy operations
- ♦ System Exploitation via holes generated by threats
- ♦ Extensible architecture for rapid threat development
- ♦ Threat catalog (for government customers)
- ♦ Non-disruptive techniques for testing



### INFORMATION ASSURANCE TEST TOOL (IATT)

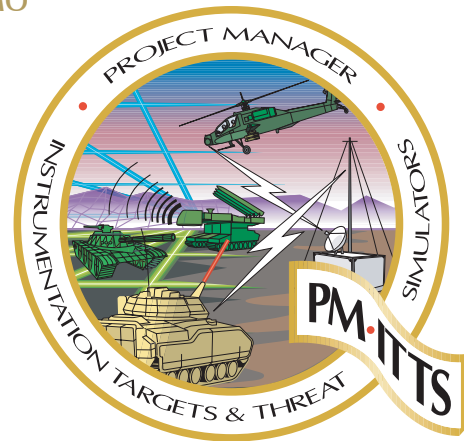
After its initial acceptance test in 3Q FY 2002, IATT was made available for use in T&E, training, and planning / wargaming environments. New threats are being developed every day in all parts of the world. Continuous work is necessary to incorporate new threats and develop capabilities for withstanding the evolving information technology threats.

For IATT, new tools and threats are currently planned and under development to provide the most realistic and accurate information threats available for use in these environments.



### TEAM UPDATES

- ♦ Ms. Terri Cuniff, who retired from the Navy, was "welcomed aboard" and joined the ranks of IMO as a Program Analyst in Jun 2002.
- ♦ Ms. Lorraine Castillo, IMO was selected for Employee of the Quarter in Fall 2002.
- ♦ LTC Bill McGuire, Deputy Director, IMO retired from military service in 2002. His retirement ceremony was conducted at PEO STRI in Nov 2002.
- ♦ Mr. Craig Janisz, IMO was selected for the Army Acquisition Corps Competitive Development Group (CDG) in Jun 2002.
- ♦ Mr. Vic Krepacki, IMO received his 20-year service award in Aug 2002.
- ♦ Mr. Ralph Holweck, IMO was recognized for 31 years of service in Dec 2002.
- ♦ Mr. Charles Farrior, TMO was welcomed as the New Chief of the Business Management Office in Sep 2002.
- ♦ Ms. Vickie DeBose, TMO was promoted to the Team Leader, Financial Management in Jun 2002.
- ♦ Ms. Shellia Battles, TMO joined the Contracts Team in Apr 2002.
- ♦ Mr. Andy Balch, TMO joined the Contracts Team in Jun 2002.
- ♦ Ted Howell, TSMO, retired from PM ITTS in Jan 2002.
- ♦ Mr. Jamie McNees, Ms. Jana Bladow, Mr. Billy Spinks, and Ms. Michelle Staggs were hired by and joined the ranks of TSMO as Electronics Engineers in 2002.



## *Project Manager* FOR TRAINING DEVICES



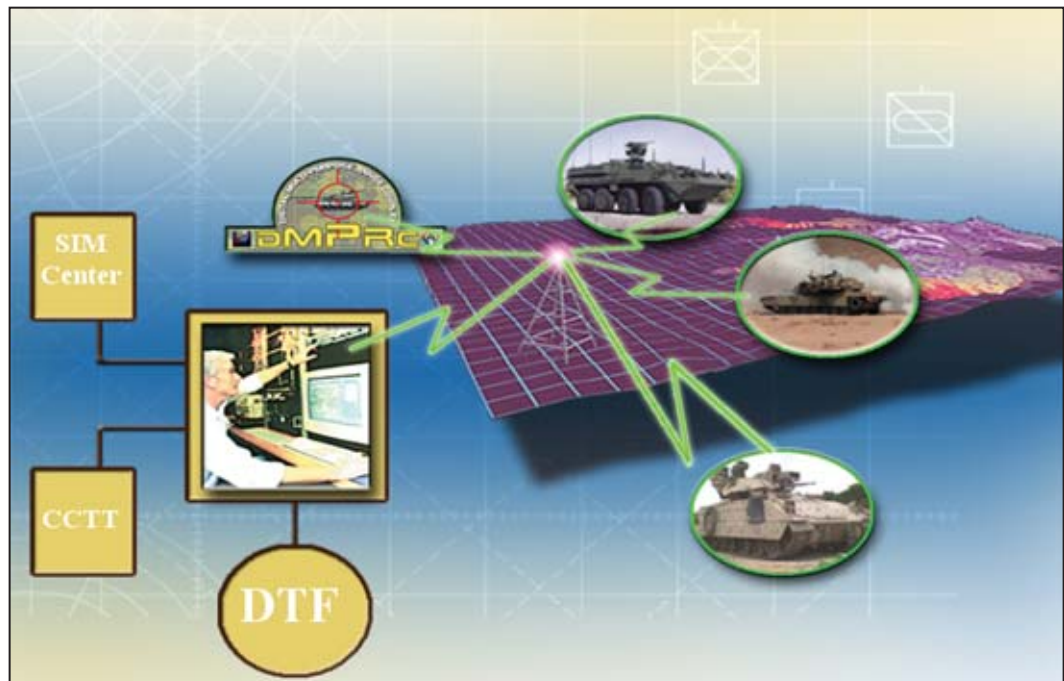


### FIXED TACTICAL INTERNET (FTI)

FTI is a digital data radio backbone network, which provides the division a realistic training environment by replicating the tactical internet with virtual and constructive simulations. This alleviates the training requirement to constantly deploy signal assets to establish and maintain the tactical internet. FTI replicates digital systems in order to provide situational awareness down to platoon and squad level. FTI provides the linkage between the brigade Tactical Operations Center (TOC), the battalion TOC, the company, and the platoon through radio data nets on key platforms.

During 2002, one FTI net was completed at Fort Lewis and Yakima Training Center, Washington. Operations and sustainment activities at Fort Hood were transitioned from PM TRADE to PEO STRI, Operations Directorate.

FTI contractor is Anteon, Orlando, Florida.

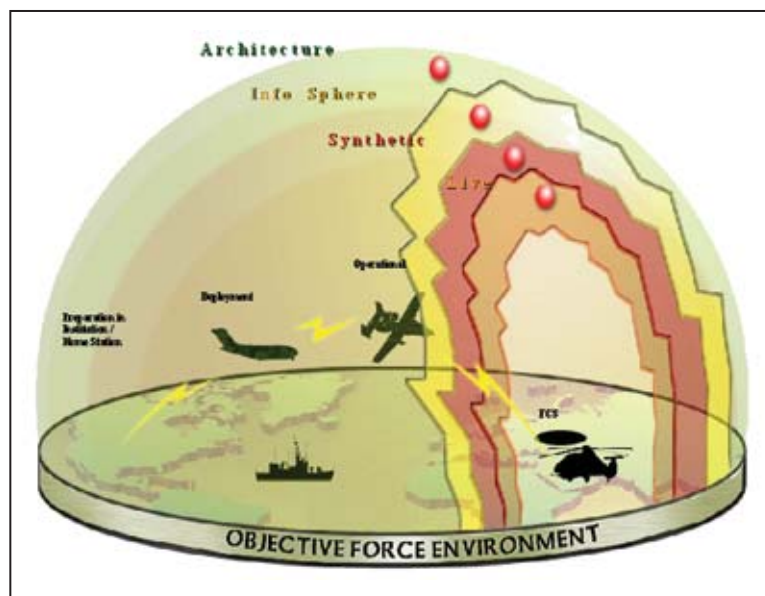


### DIGITAL TRAINING FACILITY (DTF)

The Fort Hood DTF is the "Center of Excellence," the ABCS University for the digital Army with a knowledge architecture that is scalable and exportable Army-wide as digitization is implemented throughout the force. As an extension of the Reimer Digital Library (RDL), the DTF functions as the central repository for ABCS training and performance support, including ABCS tactics, techniques, and procedures (TTPs) and technical information relating to ABCS. DTF enjoys connectivity throughout the Army via the RDL, the WARRIOR-T Database, the PEO C3S Knowledge Center, and the Operations and Systems Architecture Library. DTF provides lessons learned to the Center for Army Lessons Learned (CALL), as well as providing access to CALL for our users. In this way, the knowledge accumulated from fielding the first digital division is captured and exploited for the follow-on divisions in III Corps and eventually for the entire Army. PM DT provides acquisition support to Fort Hood, in support of course development and instruction.

### LIVE TRAINING TRANSFORMATION (LTT)

LTT encompasses a complete modernization of the systems, methodologies and employment strategies in the live training domain to better support the Objective Force. Each MCTC will be overhauled, and new capabilities will be developed for HITS, DMPRC and MOUT. The first contract within the LTT is for the development of the Common Training Instrumentation Architecture. The first spiral development for this architecture was completed with the delivery of Version 0.1 in September 2001.





### COMMON TRAINING INSTRUMENTATION ARCHITECTURE (CTIA)

CTIA is a component-based open-systems architecture that supports a wide live training user base, technology insertion, flexible operational concepts, interoperability, and rapid response to new requirements. The characteristics that set the CTIA apart from other architectures are:

- ♦ Commonality - Reduces Development and Procurement cost, and promotes reuse.
- ♦ Modularity - Reduces lifecycle support and maintenance costs, improves Reliability, Availability and Maintainability (RAM).
- ♦ Openness - Avoids obsolescence, leverages COTS, and enables technology insertion.
- ♦ Interoperability:
  - ♦ Live/Virtual/Constructive - Increases training opportunities, enhances each domain.
  - ♦ Simulation to C4ISR - Sustains "digital" skills, enables IO/EW training.
  - ♦ Joint/Coalition - Train as we fight.
  - ♦ Test and Training - Reduce costs.
- ♦ Enables modernization, reduces fielding time for new requirements, enables embedded and deployed training.

The CTIA development contract was awarded 13 March 2001 and the first build was delivered 30 September 2001. Following is a description of the first build.

CTIA contractor is Lockheed Martin Information Systems, Orlando, Florida under the STOC.

### NATIONAL TRAINING CENTER RANGE COMMUNICATIONS SYSTEM (NTC RCS)

STRICOM has a requirement to replace/renovate the RDMS and OCCS with the RCS at the National Training Center (NTC), Fort Irwin, CA. The RDMS (Range Data Measurement Subsystem) collects and distributes digital training data from the Tactical Engagement Simulations (TES) to the appropriate components of the IS (Instrumentation System) and disburses the outbound data from the IS to the appropriate entities. The RDMS reports the position location of the instrumented participants in CTC exercises, with weapons engagement, and other event data, to the CIS via an integral data link and associated interfaces. The RDMS integral data link (radio component) is two-way, thereby providing the means to send CIS-generated commands and other control messages to the instrumented participants. (The existing RDMS at the NTC has reached the end of its useful service life and is no longer cost effective to support.) The RDMS is a single point of failure for the CIS.

The OCCS (Observer Controller Communications System) provides the voice communications link for the Observer Controllers in the exercise area and the Analysts at the CIS. It also provides the communication capability for Post support and Safety activities.

The NTC RCS has a modular and open architecture. It uses the same network infrastructure for data and voice communications. It interfaces with the CIS using the existing LAN structure for network setup, management, and control from the CIS. It uses the TCP/IP protocol. The RCS Gateway(s) includes redundancy to the extent that there is no single point of failure that results in an interruption of over one-minute of voice or data flow or prevents the real-time control and monitoring capability for over five minutes.

The NTC RCS will have sufficient throughput capacity to accommodate 5,500 participants (3,000 OCCS and 2,500 RDMS threshold) and 10,000 (6,000 RDMS and 4,000 OCCS objective) participants.

### NATIONAL TRAINING CENTER OBJECTIVE INSTRUMENTATION SYSTEM (NTC OIS)

The NTC-OIS is based on and compliant with the Common Training Instrumentation Architecture (CTIA) and Live Training Transformation (LTT) concept. The NTC OIS is a program to facilitate force-on-force training at Fort Irwin; CA. Ft. Irwin trains U.S Army Active Component Units, National Guard Units, and provides joint training capability with the U.S. Air Force. The NTC OIS is an upgrade from the current NTC Instrumentation System (NTC-IS) and will be developed according to the Common Training Instrumentation Architecture (CTIA). The CTIA serves as the common core architecture for the OIS programs at the National Training Center (NTC) and the Joint Readiness Training Center (JRTC), Combat Maneuver Training Center (CMTC) as well as the instrumentation system programs for several home stations and the JRTC Military Operations in Urbanized Terrain (MOUT) facility.

The NTC-OIS consists of four sub-systems: (1) Core Instrumentation Sub-system, (2) Communication Sub-system, (3) After Action Review Sub-system. (4) Instrumented Tactical Engagement Simulation (TES) Sub-system. The NTC OIS is an integrated system of computer software and hardware, workstations, databases, voice and video recording, production, and presentation equipment, interface devices, and communication systems. The system is configured to collect, report, store, manage, process, and display event data for 2000 instrumented players with the capability to expand to 4000 instrumented players.



### COMBAT MANEUVER TRAINING CENTER RANGE DATA MEASUREMENT SYSTEM/ RENOVATION (CMTC RDMS/R)

The RDMS/R program renovates the current CMTC RDMS to prevent a catastrophic failure and prolong the life cycle of the RDMS until the CMTC Objective Instrumentation System is fielded. The original RDMS was installed in 1992 as an integral part of the CMTC-IS, with a useful lifetime of 7-10 years. It relays Tactical Engagement Simulation System (TESS) data from and to exercise players and the Core Instrumentation Subsystem. Currently, some essential spare parts are difficult to find or non-existent as they are no longer produced.

The RDMS/R replaces Logic Modules, Player Units (DCIs) and other essential hardware, and modify software to integrate replacement components. Since the RDMS is a single point of failure for the CMTC-IS, this project will significantly reduce the risk of RDMS failure and prolong the RDMS' life until the OIS is fielded in FY09-10.

### DIGITAL MULTI-PURPOSE RANGE COMPLEX (DMPRC)

The Digital Multi-Purpose Range Complex (DMPRC) live and simulated fire range will replace obsolete and inadequate targetry in order to stimulate new weapon systems, stress Warfighters, and provide enhanced training data collection and After Action Review (AAR) capabilities. The DMPRC will incorporate digital system training as well as integrate multiple ranges and training environments for the training units. STRICOM is the Material Developer for the DMPRC. PM TRADE has the Lead for the program.



### DIGITAL MULTI-PURPOSE RANGE COMPLEX (DMPRC), CONTINUED

The DMPRC will be fielded by leveraging successful systems designed for the training and testing communities. It will maximize Commercial-Off-The-Shelf (COTS) hardware and software to meet Army requirements for state-of-the-art live training systems. A complete Life Cycle Analysis is being performed to ensure that the solution will provide a system that is cost effective and satisfies all requirements.

The DMPRC will support live fire exercises (LFX) for individual and crew served weapon skill qualification and sustainment, and collective training events at local training areas, combat training centers, and in tactical force projection environments (Tables VIII and XII). Range Operations (ROPS) personnel will use training exercise scenarios to prepare the DMPRC for exercise execution. During exercise execution, ROPS personnel will use the new generation range subsystems to provide realistic friendly, neutral, and threat simulations. The instrumentation will collect audio, video, digital training, exercise execution, and Real Time Casualty Assessment (RTCA) data to support DMPRC subsystems for training data analysis, preparation, presentation, feedback for the AAR and the Take Home Package. The DMPRC will be a live, virtual and constructive gunnery and tactical complex that allows for individual, crew, platoon and Combined Arms Live-Fire Exercises (CALFEX) that incorporate digital information systems.

The DMPRC will be an evolutionary system of systems, rather than a revolutionary end state. The DMPRC will serve as the starting point for a common family of products being developed by STRICOM known as the Common Training Instrumentation Architecture (CTIA). The DMPRC will support the definition and the development of the CTIA. The Objective phase of the DMPRC will be fully CTIA compliant. The DMPRC at Fort Hood will become the basis for controlling enhancements and integration requirements for future DMPRC ranges.

Fort Hood is the first DMPRC being fielded. IOC scheduled for January 2004.

### MILITARY OPERATIONS ON URBANIZED TERRAIN INSTRUMENTATION AND TRAINING DEVICES WORKING GROUP (MOUT I AND TDWG):

The MOUT Instrumentation and Training Device Working Group (composed of the User, Material Developers and Industry Partners) will further efficient and effective management of the materiel acquisition and sustainment activities supporting MOUT training by leveraging resources, technology, and good ideas and ensure, to the maximum extent possible, horizontal technical integration of MOUT training devices and instrumentation. In 2001, the MOUT land TDWG broadened its spectrum of participants to include the STOC contractors and Army Range systems to further expand the dissemination of information and commonality. A particular focus for this year within the land TDWG is on the technologies associated with advanced position systems. The MOUT land TDWG is broadening the domain from solely MOUT to include Combine Arms Collective Training Facility (CACTF) Urban Assault Courses (UAC), Battle Assault Courses (BAC), Digital Multi-purpose Training Range (DMPTR), Breach Facilities and Shoot-Houses to more adequately focuses on the total training range.

#### *Objectives:*

- ♦ To share information and good ideas
- ♦ To leverage technology and acquisitions
- ♦ To solve complex and/or common problems
- ♦ To reduce acquisition and sustainment costs
- ♦ To synchronize and integrate the collective efforts
- ♦ To foster HTI through commonality and standards
- ♦ To support the objectives of the MOUT Training Strategy



### MOBILE MILITARY OPERATIONS ON URBANIZED TERRAIN (MOUT)

The U.S. Army has identified a requirement to train soldiers for Military Operations on Urbanized Terrain (MOUT) who are forward deployed to remote locations. To meet this requirement PM TRADE and Anteon Inc. developed a transportable MOUT training facility called Mobile MOUT. The Mobile MOUT was designed to replicate a small village and to train soldiers on individual and collective MOUT tasks through platoon level. The MOUT facility may also be used for homeland defense to train law enforcement in anti-terrorist and hostage rescue situations. PEO STRI was directed by the Department of the Army in December 2002 to field Mobile MOUT to Kuwait and Afghanistan to support Operations Iraqi Freedom and Enduring Freedom. Funds were provided via the Army Strategic Planning Board in early February 2003.



Various types of exercises are supported by the Mobile MOUT. These include live-fire and force-on-force. The training unit may use Short Range Training Ammunition (SRTA) for live-fire and Ultimate Training Munitions (UTM), Multiple Integrated Laser Engagement System (MILES), or paint ball for force-on-force exercises. Swing-out and pop-up targets are controlled by the instrumentation system. Targets may be equipped with a MILES shoot back capability. All activity is recorded on digital video with significant actions or events of the exercise made into a presentation for an AAR. The training unit is provided a "take-home" package, including a CD, DVD, or videotape that will afford the opportunity to review the exercise.

The MOUT facility consists of operational structures made up of one or more standard shipping containers (8 feet wide x 40 feet long x 9 feet high). Containers may be set up in single or multiple container configurations to replicate buildings. Containers may be placed side-by-side or stacked on top of each other up to three high. Interior stairwells are added for multiple story buildings.

### MOBILE MILITARY OPERATIONS ON URBANIZED TERRAIN (MOUT), CONTINUED

Balconies may be added when one container is stacked above two. Interior design allows for center doorway rooms, corner doorway rooms, closets, trap doors for weapon caches, and window shutters. Moveable walls allow for the interior signature of the site to be changed. Facades may be added to container exteriors to enhance realism. Breach holes may be placed in the side of a container. Covered with sheet rock, a breach can be executed using a single strand of detonation cord. Doors have reinforced frames that house plywood allowing kick-ins, rams, or hooligan bars. Commands may work with the PM TRADE Project Director to tailor the site design to meet specific mission area training objectives.



### MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM XXI



MILES XXI is the follow-on production procurement of the MILES 2000 training systems. MILES XXI is a force-on-force training system used by both dismounted infantry and mobile weapon crews to increase both combat readiness and fighting effectiveness.

MILES XXI uses laser light in the form of pulses to transmit weapon information to a target. These pulses are transmitted each time a weapon is fired. Information contained in the pulses includes the player ID and the type of weapon used. The target entity processes the information to produce a casualty assessment.

The casualty assessment for a dismounted soldier can produce a state of killed or wounded.



### MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM XXI, CONTINUED

The casualty assessment for a mobile weapon system can produce several outcomes, which include catastrophic kill, mobility kill, and communication kill. Both dismounted soldiers and mobile weapon system platforms are equipped with a laser transmitter and laser receiver.

The ability to support an After Action Review is an essential feature of the MILES XXI training system. This is possible because all player activity is recorded during an exercise.

A Delivery Order was awarded to Lockheed Martin Information Systems in May 2001 for Low Rate Initial Production. Production and in-plant testing have proceeded on all MILES XXI configurations. The Systems Integration Test will be conducted at Fort Polk, LA in April 2002. A limited number of MILES XXI systems (370 vehicle kits) were also procured to support the testing and training of the Interim Brigade Combat Team.



### OneTESS

The OneTESS team was formed in December 01. OneTESS is a family of compatible live environment engagement capabilities that replicate weapon effects of combat systems in the conduct of collective training. Until the RandD funds begin in FY03, the OneTESS team is busy pulsing industry for emerging technologies. OneTESS is focused on advancing the state of tactical engagement simulations to provide training fidelity for the latest weapon system capabilities. The new technology will be applied to produce prototypes for the Block I programs that will focus on Indirect Fire / Non-Line of Sight, Direct Fire, the Individual Soldier, Combat Vehicles, and Aircraft. Additionally, OneTESS will be closely linked to the CTIA effort and coordination is ongoing.

### OPPOSING FORCES SURROGATE VEHICLE (OSV)

PMTRADE has continued with the production and fielding of the Opposing Forces (OPFOR) Surrogate Vehicle (OSV). Using the M113 chassis and M2A2 Bradley turret components, the vehicle resembles a Russian BMP-2. Capabilities closely mirror a BMP-2s troop capacity and weapon system. Currently 100 OSV have been fielded to the 11th Armor Cavalry Regiment, the National Training Center (NTC)'s OPFOR. The OSV has performed outstandingly along with positive reaction by both crews and command. Col. John D. Rosenberger stated, "This vehicle is what we need to sustain opposing force. With better technology on these vehicles, we are creating a real threat to the BLUFOR. It better replicates threats we will see in the future. With a tougher force, we are raising the Army standards to a higher level." Col. Rosenberger also said, "The vehicle is more reliable and it removes much of the maintenance load, thus improving the attitude of the unit." Future fielding will continue in support of all Maneuver Combat Training Centers (MCTC). Additionally, with a slight Visual Modification change, this basic configuration is planned to go into production as a Tank variant to replicate a generic tank threat. First tank version should be fielded to JRTC in FY03.



### MILES 2000

PM TRADE has continued with the production, fielding, and replacement of the Basic MILES legacy system which was fielded in the late 70's early 80's. MILES 2000 is a state of the art training system that at contract completion will have fielded two Army installations Forts Stewart and Lewis and all United States Marine Corps requirements, additionally numerous United States Air Force Security Police locations will also have been fielded. MILES 2000 more realistically replicates the ranges of the weapon systems being simulated, additionally the system is more rugged and reliable and less expensive to operate than the previous system. With the fielding of MILES 2000 and follow-on MILES XXI, Soldiers, Marines and Airman will be able to train to maximum extent of their weapon systems and combat platforms and not just to the limits of the current legacy system. Currently the program is in its fourth production option with a fifth option following immediately thereafter. MILES XXI will continue PM TRADE's mission of replacing Legacy MILES at all home-stations, camps and CTCs. In FY01 the MILES 2000 program received a Full Materiel Release from the Milestone Decision Authority (CG STRICOM) for all contracted systems with the exception of the dismounted TOW System. In addition to receiving Materiel Release, LOTS IV and V were delivered to Forts Stewart and Lewis. These deliveries completed the MILES 2000 requirement at Fort Stewart. Lot IV deliveries fulfilled the USMC initial requirements. With the exception of completing the Cope Thunder effort these deliveries closed out the original US Army MILES 2000 contract, final amount obligated on this contract is approximately \$140M. Based upon changes within the BOI attributed primarily to additional IBCT requirements, additional MILES 2000 was awarded in 2d Qtr of FY01 to support Ft. Lewis and its BCT. This effort is supported by a new contract utilizing the STRICOM Omnibus Contract. A new contract was awarded to Tech-Masters Inc for additional MILES 2000 hardware for Ft Lewis; deliveries for this award are scheduled to begin in 3rd Qtr 02.



### COPE THUNDER

Cope Thunder is an initiative to instrument MILES 2000 then integrate it into the USAF training ranges in Alaska. In FY00 the initial Cope Thunder Deliverable was satisfied, this requirement called for producing an instrumented MILES 2000 Individual Weapon System (IWS) and designing the instrumentation interfaces. The instrumentation involved was to provide position location only and satisfied an USAF Cope Thunder Exercise requirement. Completion of the initial effort will continue into FY02 and include field-testing coupled with the fielding of additional IWSs. This effort is only Phase One of an anticipated six-phase plan to instrument the Alaska Range vicinity at and between Eielson AFB and Fort Wainwright AK.

### MAIN GUN SIGNATURE SIMULATOR (MGSS) AND DIRECT/INDIRECT FIRE CUE (DIFCUE)

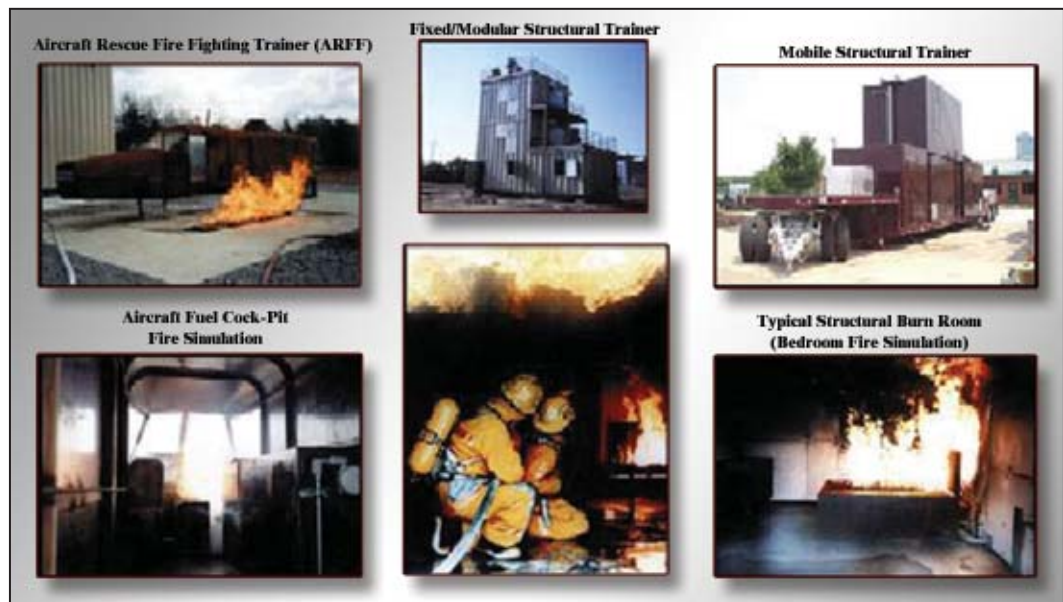
MGSS and DIFCUE are electro-magnetic firing devices being fielded to support critical training deficiencies currently existing at Army Homestations and the CTCs. The MGSS will replace the Hoffman tank Main Gun Signature and the DIFCUE will address a CTC training shortfall at the CTCs by providing an indirect fire cue for RF Indirect Fire. These devices previously were delivered under the original MILES 2000 contract. In FY01 MGSS was delivered to Forts Stewart, Lewis and Hood (MAIS Program). In addition to delivering hardware the associated Pyrotechnics M30 (MGSS) was Type Classified and Materiel Released and the DIFCUE was Type Classified with Materiel Release anticipated in 3rd Qtr of FY02. With the close out of the MILES 2000 contract and additional requirements remaining, a new contract was awarded using STOC that at end state will satisfy current Army requirements.

### US ARMY FIRE FIGHTING TRAINING SYSTEMS (FFTS)

The US Army Fire Fighting Training Systems (FFTS) are state-of-the-art-training systems that safely replicate flames, heat and reduced visibility (using mineral-oil smoke obscuration/generation system) during fire fighting training scenarios.

### US ARMY FIRE FIGHTING TRAINING SYSTEMS (FFTS), CONTINUED

The FFTS integrate proven, commercially available fire fighting training technology into structural (mobile and modular/fixed) or aircraft rescue and fire fighting (ARFF) training systems. The modular/fixed structural FFTS consists of a three-story trainer that replicates bedroom, kitchen, living room, and storage/office fires. It also includes flash-over simulations, and



Fire Fighting Training Systems (FFTS)

incorporates (as training aids) a passive stand-pipe/sprinkler system and a replaceable cut-away roof section to allow firefighters to vent the FFTS structure. The mobile structural FFTS is a transportable, self-contained (i.e. built-in propane and electrical power sources), two floor version of the modular/fixed structural FFTS. The ARFF trainer is a transportable, self-contained (i.e. with built-in propane and power sources), aircraft mockup (42 ft. long by 8 ft. wide approximately) with a reconfigurable wing (for fixed or rotary configurations). It replicates a cockpit fire, an overheated battery (smoke only), and incorporates a cut-away pilot rescue door as a training aid. The ARFF trainer also includes an exterior, rectangular-four pans fuel spill fire simulation to impede pilot rescue. All FFTS configurations incorporate extensive safety features and safeguards to activate system shutdown in case of unsafe propane and temperature levels in the burn rooms, or personnel emergencies.



### US ARMY FIRE FIGHTING TRAINING SYSTEMS (FFTS), CONTINUED

All mobile FFTS have the capability to be connected to fixed propane and electrical power sources. FY96, FY98, FY99, and FY01 plus-up funding has been provided by Congress to procure FFTS for 18 CONUS and 3 OCONUS U.S. Army military installations to date. Some of these FFTS are being used jointly by the Army and by Air Force or civilian fire departments under mutual aid agreements. The first modular/fixed structural FFTS was fielded at Fort Monmouth, NJ, on October 30, 1997. The first ARFF was fielded at Fort Belvoir, VA, on March 6, 1998. The first mobile structural FFTS was fielded at Fort Lewis, WA, on June 26, 1998. In FY01 successfully completed smoke generation retrofits on all FFTS fielded to date. Awarded contract modification to procure additional FFTSs with FY01 Congressional plus-up funding. Extended contract option periods from 48 to 96 months to preserve the cost savings benefits of the priced options. Negotiated and finalized delivery schedule of FY01-funded FFTS with contractor. Conducted initial site surveys and briefings at new FFTS installations (FY01-funded).

### TANK WEAPONS GUNNERY SIMULATION SYSTEM/ PRECISION GUNNERY SYSTEM (TWGSS/PGS)

The U.S. Army's only digital, two-way appended, laser based precision gunnery and maneuver training device for Abrams Tanks and Bradley Fighting Vehicles. Also procured for the USMC Light Armored Vehicle. The TWGSS/PGS is integrated with the vehicle's fire control system providing exact replication of the ballistic solution for the selected ammunition type and range to target. The TWGSS/PGS allows full functionality of vehicle's fire control system including lead, super-elevation, and laser range finder. Realistic tracer, burst and obscuration effects are provided in all vehicle sights. Global positioning system, aural effects and data capture for enhanced. After Action Review are also provided. TWGSS/PGS has a rate of return on investment of less than 28 months. Tank main gun training ammunition rounds are reduced by 10 round/crew/year; Bradley 25mm rounds are reduced by 192 rounds/crew/year. Over 1700 TWGSS/PGS are currently fielded to Active and Reserve units around the world. Total basis of issue is 2204.



### URBAN OPERATIONS

The United States Army Training and Doctrine Command (TRADOC) formed an urban operations task force for the purpose of developing an overarching urban operations training strategy for the U. S. Army. The strategy was completed in January 2001 and approved by TRADOC in March of 2001 and is currently awaiting approval by the Chief Of Staff of the Army. It includes doctrinal and training publication updates, recommendations for both new and upgrades to existing urban training facilities, all three of the live/virtual/constructive simulation domains, training ammunition requirement assessments, and sustainment cost estimates.

The major focus of the strategy will revolve around four new facilities designed to provide individual through battalion level home station urban operations training. These new training facilities will allow units to train soldiers on live demolitions breaching techniques, building entry and room clearing techniques under live and blank fire conditions, limited subterranean training, and an urban training facility large enough to conduct combined arms force on force collective training at the battalion/task force level. The proliferation of these urban training facilities across the Army will help ensure our soldiers are prepared to conduct full spectrum operations in any urban environment.

The Urban Assault Course (UAC) is a five-station round robin training facility designed to teach basic building entry and room clearing techniques. Training will be geared toward blank fire MILES/Special Effects Small Arms Marking System (SESAMS) or "paintball" conditions. The UAC will be equipped with state of the art 3 dimensional targetry that has plug and play capability. The Shoot House will be constructed of bullet absorbing material with interconnecting rooms and hallways. The Shoot House will be a live fire training facility and will be completely instrumented to allow full motion image and audio capture and will also have an After Action Review (AAR) facility. The Breach Facility will be three station live demolitions facility designed to teach explosive door, window and wall breaching techniques. The Combined Arms Collective Training Facility (CACTF) will be the largest of the four new training facilities consisting of 20 to 26 buildings. This facility was designed to provide a force on force combined arms training facility for company team and battalion task force size units. The CACTF will also be fully instrumented and has an After Action Review (AAR) building as part of the facility.

### COMBAT MANEUVER TRAINING CENTER RANGE DATA MEASUREMENT SUBSYSTEM/ RENOVATION (CMTC RDMS/R)

The RDMS/R program renovates the current CMTC RDMS, a single point of failure for the CMTC-IS, to prevent a catastrophic failure and prolong the life cycle of the RDMS until the CMTC Objective Instrumentation System is fielded in FY 09-10. Some essential spare parts are difficult to find or non-existent as they are no longer produced. The original RDMS was installed in 1992 as an integral part of the CMTC-IS, with a useful lifetime of 7-10 years. It relays Tactical Engagement Simulation System (TESS) data between exercise players and the Core Instrumentation Subsystem for use in After Action Review feedback to the units conducting training at CMTC.

### COMBAT MANEUVER TRAINING CENTER OBSERVER CONTROLLER COMMUNICATIONS SYSTEM (CMTC OCCS)

The CMTC OCCS is a program to develop, field and provide operations and support for an exercise control radio system for the CMTC at Hohenfels, GE. The OCCS is an independent system from the CMTC Instrumentation System (CMTC-IS). However, the OCCS will aid the exercise controllers who operate the CMTC-IS and use information collected by the CMTC-IS.

Currently, the Observer Controllers (OCs), Training Analysis and Feedback Analysts (TAFAs) and other CMTC exercise controllers communicate with Single Channel Ground and Airborne Radio System (SINCGARS) radios and limited-range Frequency Modulation (FM) radios on the CMTC tactical frequencies. This system restricts the radio frequency spectrum available for rotational training units and also limits the frequency-hopping capability of the SINCGARS radios used by the training units. Additionally, the limited range of FM radios degrades safety, command and control and training feedback.

The CMTC OCCS, after fielding in FY04, will not only solve these problems, but will improve the overall communications infrastructure. The OCCS program will use Commercial Off The Shelf (COTS)-item radios for the exercise controllers, provide additional antenna and repeater equipment to eliminate communications "blind" spots and supply other necessary hardware to support the infrastructure. As a result, the OCCS will greatly enhance the O/C functionality and training feedback by providing greater range and resolution. Rotational units will be able to train more realistically with a greater bandwidth of frequencies.



### COMBAT MANEUVER TRAINING CENTER SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEM (CMTC SINCGARS) INFRASTRUCTURE

The CMTC SINCGARS Infrastructure is a program to correct tactical communications deficiencies for the CMTC Instrumentation System (CMTC-IS) at Hohenfels, GE. The program will correctly integrate the Range Monitoring and Control Subsystem into the CMTC-IS communications structure by eliminating these problems:

1. Power amps degrade functionality of the SINCGARS radios (e.g. Only can key 15 radios at one time)
2. Inadequate antenna configuration.
3. Training Analysis and Feedback Analysts can only record 48 nets - must have capability to record 96 nets.
4. Transmit and receive antennas too close.
5. Intermodulation problems.
6. Not compatible with NATO radios.

The new infrastructure will be fielded by early FY05.

### COMBAT MANEUVER TRAINING CENTER INTERIM LIVE FIRE INSTRUMENTATION SYSTEM (CMTC ILF-IS)

The CMTC ILF-IS is a program to collect and process training performance data from instrumented vehicles conducting live fire, combined-arms training at Grafenwoehr Training Area, Germany. The ILF-IS will be an integrated system of computer software and hardware; workstations; databases; voice and video recording, production, and presentation equipment, interface devices; and communication systems to accomplish the following functions: Exercise Planning, System Preparation, Exercise Management, Training Performance Feedback, and System Support. The CMTC ILF-IS will be fielded during 2Qtr / FY04.

### COMBAT MANEUVER TRAINING CENTER LONGBOW APACHE INTEGRATION (CMTC LBA-I)

The CMTC LBA Integration is a program to enable training of Longbow Apache aircraft at the CMTC, Hohenfels, GE, using the CMTC Instrumentation System (CMTC-IS) to collect and process training performance data for use in After Action Review feedback to the units that train at CMTC. The project is sponsored and funded by PM Apache Attack Helicopter. The capability or improvements are as follows:

- ♦ Collects training performance data from the aircraft and transfers the data to the Core Instrumentation Subsystem (CIS) for processing.
- ♦ Displays the data on the TAF workstations for use by the TAF analysts.
- ♦ Stores the data for AAR preparation and presentation.

The LBA-I will be fielded during FY05.

## Personnel Highlights

### CONGRATULATIONS

Mr. Mike Sims was named as STRICOM Employee of the quarter - 2nd Quarter 2002.

### FIXED TACTICAL INTERNET (FTI)

Completed one Fixed Tactical Internet (FTI) net at Fort Lewis and Yakima Training Center Washington.

## *Project Manager* WARFIGHTERS' SIMULATION



### WARFIGHTER SIMULATION (WARSIM) / WARSIM INTELLIGENCE MODULE (WIM)

WIM is the US ARMY intelligence component of the JSIMS composition.

WIM is currently developing correlated US Army Intel models (secret and top secret) and collaborating with the US ARMY JTC-SIL developing a UAV visualization system for constructive simulation ISO JSIMS.

The WIM program is currently being developed by Veridian Corporation in Orlando, Florida.

WIM is currently meeting all its cost schedule and performance requirements.

### COMMAND AND CONTROL SIMULATION EQUIPMENT (C2SE)

C2SE has prepared all of the fielding requirements so that the new equipment can be procured and fielded in accordance with the HQDA approved fielding plan.

### CORPS BATTLE SIMULATION (CBS)

CBS provided sorely needed training relevance upgrades in the FY02 release of CBS Version 1.7.0.

Along with the training relevance upgrades, CBS also released the new workstation software, which will be used on modern PCs.

### JOINT TRAINING CONFEDERATION (JTC)

The JTC has achieved all of the objectives set for FY02, and JTC02 has performed as expected.

### TACTICAL SIMULATION (TACSIM)

TACSIM's latest version, T5, passed security accreditation, and was fielded to all user sites.

T4 was successfully used in the Ulchi / Focus Lens exercise in August 2002.

Linda Morris was named as Employee of the Quarter in FY02.

### INTELLIGENCE / ELECTRONIC WARFARE TACTICAL PROFICIENCY TRAINER (IEWTPT)

The IEWTPT development schedule became synchronized with the JSIMS development schedule.

The IEWTPT team received the STRICOM Team Achievement Recognition (STAR) award for contract execution in FY02.



## *Operations and Support Directorate*

Operations & Support Directorate was first to expand Strategic Partnering to a truly interoperable level by combining five key LCCS Prime Contractors into a unique Strategic Partnering relationship to develop/provide transparent support to fielded training devices across multiply locations and domains. These initiatives and activities all include multiple customer involvement and participation. STRICOM's Commanding General used an Operations & Support Directorate's contract vehicle to establish the inaugural Historical Black College and Universities/Minority Institutions (HBCU/MI).



*Improved training support to the soldier and increased internal effectiveness and efficiency formed the cornerstones of the Operations and Support Directorate's (OPS) greatest accomplishments in FY02. The OPS Strategic Vision and Mission drove its activities. The paragraphs below describe the major highlights of the OPS Directorate operations for FY02.*

### LIFE CYCLE CONTRACT SUPPORT (LCCS) STRATEGIC PARTNERING

OPS made major improvements in training support through its Strategic Partnering Initiative. In April 2002, OPS took its Strategic Partnering Process to an Army Post, Fort Hood, TX. This initial "Customer Hosted" workshop resulted in the development of a Tactical Implementation Plan (TIP); nearly two-hundred plans and Action Items to improve soldier training support. Developed by the combined efforts of OPS Senior Leaders, III Corps and Fort Hood Senior Leaders and Managers, and the Senior Leaders and Managers of OPS five Life Cycle Contract Support (LCCS) industry partners, the TIP identified specific issues to improve soldier training support at Fort Hood. Within six months, the Strategic Team addressed all issues and Fort Hood's III Corps soldiers experienced quantum improvements in training support while OPS and its LCCS partners improved established business practices and garnered additional work, most notably for support of Digital Training (DT) and for Fort Hood's Digital Multi-Purpose Range Complex (DMPRC).

- ♦ As a significant spin-off of the workshop, the 4th Infantry Division's conducted an External Evaluation of an Armor Battalion in November 2002. This training exercise required integration of Live, Virtual, and Constructive simulations and the coordinated participation of OPS, OPS LCCS Partners, and other PMs within PEO STRI. By replicating all or parts of the exercise, many 4th ID units improved their combat readiness prior to Operation Iraqi Freedom and the same training and training support techniques began spreading throughout the Army.
- ♦ Accordingly, a similar Strategic Planning Workshop conducted at Fort Bragg, NC, in July 2002, produced another TIP and similar results. The improved use of Virtual Trainers, EST 2000s, and improvements in soldier support through Fort Bragg's Constructive Training (Simulation) Center constituted major notable results. These improvements directly impacted soldier and unit combat readiness during 82nd Airborne Division deployments to Afghanistan. The PM Field OPS' LCCS Strategic Partnering Initiative proved a watershed program for improving training support services to the soldier on an unprecedented scale.

### SUPPORT FOR DOD AND ARMY TRAINING TRANSFORMATION

The OPS Directorate actively supported DoD and Army Training Transformation (T2) through a myriad of internal and external actions. Internally, FY02 saw OPS refining and institutionalizing its weekly (T2) Team Meetings. The Deputy Director (DD) of OPS became the meetings' chairperson and the OPS Division Chiefs and Contract Leads became full-time members. Two of its members provided critical input to the PEO STRI "Transformation Synchronization and Transformation Campaign Plan." Over the course of FY02, the weekly T2 meetings became the forum for internal cross-division collaboration; control mechanism for group travel; and coordinating agency for OPS-level actions, such as LCCS Partnering, major exercise support, and activity scheduling. Buy-in and support of the weekly T2 Meetings materially contributed to the successful execution of training operations and support for DoD Exercise Millennium Challenge, and many other actions that supported the DoD, Army, and STRICOM Transformation Campaign Plans.

### DIGITAL TRAINING SUPPORT PLANNING AND SUPPORT

The Constructive Simulation Division undertook a major initiative to provide operations and support services for Army Digital Training. This initiative began with an analysis of the Digital Training systems required to replicate the Army's Digital Command and Control (C2) infrastructure and the level of work effort to support to support them. Building on the Digital Training Operations and Support work generated at the Fort Hood LCCS Strategic Partnering Meeting in April, 2002, the Constructive Simulation Division rapidly began focusing on requirements at the Maneuver Combat Training Centers (MCTCs) and requirements to support the Stryker Brigade Combat Teams (BCT). The Constructive Simulation Division developed a "Handbook for Implementing the Army's Digital Training Strategy: A Capabilities-Based Model for Installations." Using this handbook and collaborating with training management personnel at the MCTCs and at the active and proposed Stryker BCT locations led to major Constructive Simulation business expansion.

### HOMELAND DEFENSE INITIATIVE

Based on the Director's anticipatory foresight, OPS and its LCCS Industry Partners became leaders in initiatives to assist and support the national Homeland Defense Initiative following the attacks on September 2001. The OPS LCCS Homeland Defense Team participated in several high-level meeting with local government and academia in developing training and operational requirements to bolster Homeland Security. These consisted of Mobile Military Operations in Urban Terrain (MOUT) training facilities; emergency radio integration technologies; identification of potentially shared military (dual use) and law enforcement operations and training capabilities; and consolidated training site and support concepts. A major event in this arena supported by the OPS Homeland Defense and Security Team took place in March at the Orange County Sheriff's Training Facility where requirement presentations and demonstrations took place during the sheriff Departments Annual Special Weapons and Tactics Team (SWAT) competition. By year's end, OPS continued participation and support of Homeland Defense initiatives at the federal, state, county, and local government-levels.

### TRAINING DEMONSTRATIONS AND CONFERENCE PARTICIPATION

The OPS Directorate participated in more than a dozen Training Demonstrations and Conferences as Training Operations and Support providers. These activities fell into four major categories: Army-sponsored events; STRICOM sponsored events; Army-affiliated agencies or organizations sponsored events; and Reserve Component sponsored events. In the first category, the OPS Directorate supported the USAEUR Land Combat Exposition in Heidelberg, Germany; the Armor Conference at Fort Knox, KY; the Air Defense Artillery and Missile Defense World-wide Conference; the Field Artillery Conference; Training Support 2002 Conference; and the Army Range and Training Lands Annual Conference. In the second category, The OPS Directorate participated in STRICOM's Capital Hill Demonstration in February and in the Advanced Planning Briefing to Industry in May. Army-affiliated agency events that OPS participated in included the Association of the U.S. Army's Winter Conference in Fort Lauderdale, February, and its Annual Conference in October.

### TRAINING DEMONSTRATIONS AND CONFERENCE PARTICIPATION, CONTINUED

Additional events OPS supported consisted of the Army Aviation Association of America (AAA or "Quad A") Annual Conference in May and the Industry and Inter-service Training, Simulation, Education and Training (IITSEC) Conference in December. OPS also made presentations and/or operated its information booth at The Adjutants General Conference in Boise, ID, in June, and the National Guard Association Annual Meeting in Long Beach, CA, in August as examples of support to RC events. The highly engaging "Inter-Active OPS Directorate Briefing" developed and used at many of these events coupled with the articulate briefings and conversations of OPS personnel with training support users and supporters paid-off handsomely in new business for all OPS Divisions.

### LCCS PARTNERING AND ARMY-LEVEL MEETING PARTICIPATION

To maintain the positive momentum of OPS' Strategic Partnering Initiative, OPS and OPS Divisions participated in fourteen Program Management Reviews (PMRs) with its LCCS Partners and/or Army organizations and units its supports during FY02. Additionally, it participated in ten major Exhibitions, Demonstrations, or Worldwide or National level Conferences; more than four Combat Training Center Systems Integration Reviews (SIRs); and more than ten Army Working Conferences and Meetings focused on improving Army Training.

### ORGANIZATION OF THE INTEGRATION DIVISION

OPS I re-organized in FY02. By year's end it consisted of the Transformation Cell; the Customer Services Representatives; and the Financial Management Sections. The Transformation Cell continued its actions to integrate OPS' activities and operations into the DoD, Army, and STRICOM Training Transformation Campaign Plans; planned and executed LCCS Strategic Meetings; conducted analysis of the Army Recapitalization Program, the Army Digital Training Plan and supporting organizations and companies; and conducted weekly Transformation and Operations Integration and Coordination Meetings. Financial Management instituted new procedures to more closely track daily execution and obligation of funds. It oversaw execution of \$215.148M Total Obligation Authority (TOA).

In CY 2002 the Operations and Support Directorate saw major business expansion as the training requirements of the force continued to become more diverse, more technical, and more integrative of Live, Virtual, and Constructive Simulations. New initiatives - LCCS Strategic Partnering, Training Transformation, Homeland Defense, and Digital Training - became integrated into the Directorate's Strategic Plan and offered new business opportunities on an unprecedented scale. The specter of war against Iraq closed out the year with planning and pre-deployment preparations ushering in the New Year.



### OPS DIRECTORATE'S CY 2002 ON-GOING MISSIONS, ACTIVITIES, AND INITIATIVES

#### I. LCCS Strategic Partnering

- A. Fort Hood Meeting, April 2002; and Tactical Implementation Plan (TIP) Follow-up
- B. Fort Bragg Meeting, July 2002; TIP
- C. Monthly TIP Conference Calls start April 2002
- D. Program Management Reviews (PMRs)
- E. Army Working Meetings
- F. Maneuver Combat Training Center System Integration Reviews (SIRs)

#### II. Training Transformation

##### A. Major Transformation Events

1. PCO/PD Meeting December (All)
2. DITSCAP Certification Training June (Department of Defense Information Certification and Accreditation Process; System Security Authorization Agreements (T2 Cell, C)
3. Millennium Challenge Joint Exercise NTC 02 July-Aug
  - C - Digital Systems Operator Support
  - L - MILES Support
4. 4th ID L/C External Evaluation (Exeval), Fort Hood (LVC), October
5. FTI at Fort Lewis and Yakima Firing Range (C)

##### B. Joint Activities

USMC Training Support @ Fort Sill (ACT, no additional cost to the government)

### III. Training/Training Support Demonstrations (Demo) and Conference Participation

- A. Capital Hill Demo, Washington, DC, February
- B. AUSA Winter Symposium, Fort Lauderdale, February
- C. AAAA Conference, Memphis, May
- D. Armor Conference, Fort Knox, May
- E. APBI, Orlando, May
- F. TAG Conference, Boise, June
- G. National Guard Association Meeting, Long Beach, August
- H. USAREUR Land Combat Exposition, Heidelberg, Germany, September
- I. Air Defense Artillery and Missile Defense World-wide Conference, Fort Bliss
- J. Army Range and Training Lands Annual Conference, September
- K. AUSA Annual Conference, Washington DC, October
- L. IITSEC, Orlando, December

### IV. FSR Updates March and August 2002

### V. FMS Support and/or Potential New Business

- A. MILES in Tunisia
- B. JANUS in Jordan
- C. JCATS in Nigeria
- D. Flight Simulators in Saudi Arabia
- E. JANUS in Uzbekistan
- F. UH-1 Flight Simulator Training Support in Tunisia and Colombia

### VI. OPS Directorate Social Activities

- A. STRICOM Picnic, June
- B. OPS' Annual Oktoberfest, October
- C. OPS' Annual Golf Outing, November

### VII. OPS Constructive Division Activities

#### A. Digital Training Support

1. Digital Training Requirements with CTCs
2. Handbook - "Implementing the Army's Digital Training Strategy: Capabilities Based Model for Installations"

#### B. Reserve Component (RC) Support

1. National Guard-wide Distributed Battle Simulation Program Training Support
2. Air Defense Artillery
3. 91st Division USAR BBS Training Support

#### C. Post Production Software Support

1. BBS ported to PCs
2. JANUS
3. CSSTSS

#### D. Lower Fixed Tactical Internet Support at Fort Hood, Fort Lewis, and Yakima Firing Range

#### E. OneSAF Program Coordination with PM WARSIM

#### F. Contract Acquisitions and Transitions

1. Digital Systems Operators @ Fort Hood TACSIM
2. TRADOC Institutional Digitized Training Support
3. AMMEDD/Fort Sam Houston
4. Intelligence Center and School @ Fort Huachuca
  - a. Tactical Unmanned Aerial Systems (\$5M/year)
5. CBS Value Engineering Proposal (VEP) (cost avoidance of \$1.3M)

### VIII. OPS Live Training Division Activities

#### A. CTC Support

1. NTC Deep Attack
2. CMTC - Victory Strike III Aviation Exercise
3. CMTC MOUT IS

#### B. Army-wide Aviation Gunnery Training Support

#### C. Army-wide TES Training Support/Contact teams

#### D. Army-wide MILES Training Support/Contact Teams

#### E. MOUT and MOUT Instrumentation

#### F. PM ITTS Support

1. Digital Multi-purpose Range Complex @ Fort Hood
2. MAIS (Mobile Automated Instrumentation Suite)
3. LOMAH
4. Mark-19 Grenade Machine Gun TES

G. Training Terrain Cooperative Research and Development Agreement (CRADA) with Terrex

H. Contract Acquisitions and Transitions

1. TWGSS/PGS
2. TOW ITAS Field Tactical Trainer/NETT (cost avoidance of \$700k)
3. Avenger TES
4. AWSS (saves \$1.2M)
5. TOW ITAS (saves \$1.2M)
6. TES Non-Fair Wear and Tear fixed price contract (saves \$3.5M)

### IX. OPS Virtual Training Division Activities

A. Army-wide Gunnery Training Support (includes Bosnia and Kosovo)

B. Army-wide Flight Simulation Training Support

C. Army-wide ACT Training Support

D. Flight School XXI

E. Contract Acquisitions and Transitions

1. Driver Trainer for TRADOC's Transportation School (numerous sites)
2. Enhanced Tower Operator Trainer at Fort Rucker
3. GUARDFIST II Trainer Support in Korea
4. M270A1 MLRS Hydraulic Cart Support
5. M1A1 COFT Contract Termination recovering \$1.9M
6. C-AGTS Re-host
7. C-AGTS Training Support
8. FSCATT and ACT TADSS Support in Korea

## *Business Operations Office*

Served as the PEO STRI lead for the 2002 Interservice/Industry, Training, Simulation & Education Conference (I/ITEC). I/ITSEC 2002 (FY 2003) had over 14,000 attendees, exhibitors and exhibit visitors. With 44 countries and 401 companies and 60 government agencies participating in 371 exhibits this is the premier event of the year for training, simulation and education communities of the United States government and industry. As such it is also an event that attracts an ever increasing number of international participants.



### BOARD OF DIRECTORS (BOD)

To resolve command issues, STRICOM organized a BOD, which is comprised of two-star representatives from key stakeholder organizations, such as DCSOPS, PA&E, OASA (ALT), ATEC, TRADOC, NSC, and III Corps. The BOD provides the linkage to the users and at the same time the integration of STRICOM's interests and requirements into the Army's resource planning and execution processes.

### SENIOR LEADER ADVISORY BOARD (SLAB)

To assist in the Army's and other Services' resource and planning processes, STRICOM created a SLAB comprised of several, retired senior military and civilian leaders. The SLAB assists us in Command-wide strategic direction.

### TECHNICAL ADVISORY BOARD (TAB)

To help STRICOM focus on new simulation and training technologies, STRICOM formed the TAB, comprised of senior technical CEOs/Presidents. The TAB assists STRICOM to ensure currency and relevancy.

### ADVANCED PLANNING BRIEFING TO INDUSTRY

STRICOM worked with the National Defense Industry Association (NDIA) to host a successful brief of potential programs for AFAMS, NAWCTSD, USMC and STRICOM to Industry representatives.

### HONORS

On January 29, 2002, Dr. Michael Macedonia and Mr. Jerry Stahl of U.S. Army Simulations, Training and Instrumentation Command (STRICOM) were among a group of pioneers awarded certification by the Modeling and Simulation Professional Certification Commission (MSPCC). The MSPCC certified this charter group on their ability to devise a test demonstrating knowledge gained from on-the-job experience and format training.

### REMEMBERED

Carol Pentecost, from the STRICOM Resources Management Directorate.